

THE SPIRIT OF CD RECORDING



**YAMAHA**

**PRESS RELEASE**



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**Yamaha CRW-F1**

**High-quality CD recording with DiscT@2,  
Advanced Audio Master quality recording and high speed  
44x CD-R/24x CD-RW/44x reading speed**

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The YAMAHA Corporation, market leader in the development and production of high-quality CD-ReWritable drives, announces supplies of its new and innovative CRW-F1 drive series.

The series will kick off with the CRW-F1 model (internal IDE/ATAPI version), which will be available in outlets as of mid-July – information will be supplied on the external models (available from August) in a separate Press Release shortly beforehand.

The highlights of the CRW-F1 series are **Disc T@2** [disk tæ'tu:], the function for labelling the data side of CD-Rs which was first presented at the CeBIT 2002, and **Advanced Audio Master Quality Recording** for optimum sound quality of home-burned music CDs.

CRW-F1 is the first drive to offer 24x CD-RW recording and 44x high-speed CD recording with maximum data quality using the new YDC132-V chip set designed by YAMAHA.

### ***The features at a glance:***

- Disc T@2 [disk tæ'tu:]
- Advanced Audio Master quality recording
- 44x CD-R recording
- 24x CD-RW recording
- 44x reading speed
- 44x high-fidelity audio ripping
- Yamaha YDC132-V chip set powered
- CAV writing method
- CD-MRW (CD-Mount Rainier ReWrite)
- CD-RW Audio Track edit mode
- SafeBurn:
  - buffer underrun protection
  - 8 MB buffer
  - optimum write speed control
- Incl. software: Nero, Nero Cover Designer with DiscT@2 function, NeroMIX, InCD and Nero Toolkit

***Disc T@2 [disk tæ'tu:] –  
CDs simply can not be designed and labelled more individually than  
this.***

Disc T@2 represents a new technology in the new CRW-F1 series permitting not only data to be written on the data side of the CD-R but also graphic images which are practically tattooed on. This process requires extremely precise laser control which is currently only available from Yamaha.

Experts at YAMAHA have now succeeded in developing both laser output and rotation control in such a way that the CD-RW recorder is capable of burning images

onto the CD-R as well as content in the form of data. This enables the user to write a practical "memo" such as a date, index, logo or picture on the unused area of the disk.

**Disc T@2 offers a variety of different possibilities:**

- **Contents:** CDs can include information such as the album title, artist or date.
- **Promotion:** corporate logos can be burned onto the presentation CD.
- **Security:** security information can be imprinted which can not be changed.
- **Creativity:** no limits to the imagination – home-burned CDs become works of art!

The Nero software included in the scope of supply permits the Disc T@2 CD to be created as easily as a CD cover.

## ***Advanced Audio Master quality recording***

This feature offers the best sound quality for home-burned music CDs – which are almost comparable with Audio Master CDs!

"The benchmark is the original" is the Audio Master concept. Thanks to this function, any disturbances in the audio-digital data flow, so-called jitter, are reduced considerably in order to achieve the best possible sound quality of audio tracks on CD-R disks. This results in a distinctly audible clarity in the high and medium sound range, full bass reproduction and convincing spatial presentation, thus permitting reproduction which is true to the original.

When the CRW-F1 series is in Audio Master mode, longer pits and lands compared to normal audio mode are written at speeds of up to **8x** resulting in the following storage capacities of CD blanks: 650 MB – 63 mins., 700 MB – 68 mins. and **870 MB – 79 mins.**

## ***High quality & high speed thanks to the YAMAHA YDC132-V chip set***

CD-RW technology has displayed rash development in terms of writing speeds over the past few months.

CRW-F1 is fast: **44x CD-R, 24x CD-RW and 44x CD reading speed** permit high-speed CD recording, not 48x as offered by drives from other manufacturers, but without any compromises in the quality of the data recorded. This is displayed in excellent jitter values for CD-Rs burned using the CRW-F1 as well as significantly fewer C1 errors. Yamaha puts quality before minimum improvements in speed by raising the X-factor for CD-R recording.

In order to achieve maximum quality data during the high-speed recording process, Yamaha has developed its own new LSI chip set: Yamaha YDC-132-V is the heart of the new CRW-F1 drive generation and controls all of the excellent Yamaha features and specifications of the CRW-F1 series:

- High-quality full CAV writing method for CD-R/CD-RW/CD-ROM at high speed
- Yamaha's original CAV writing strategy
- Full digital optical laser pick-up servo control
- DiscT@2
- Advanced Audio Master quality recording

### **CD-MRW (CD Mt. Rainier ReWrite)**

The CRW-F1 also includes the new industrial standard CD-MRW (CD Mount Rainier ReWrite) which will sooner or later replace the standard diskette drive altogether as the CD-MRW finally permits a CD-RW to be handled just like any other exchange medium.

The essential functions are:

- formatting in the background
- CD ejection possible at all times
- logical 2K addressing when writing
- physical error management by the drive.

### **CD-RW Audio Track edit mode**

The CD-RW is also gaining in popularity as a data carrier for audio data. YAMAHA has realised this feature exclusively included in the CRW-F1 to enable audio tracks recorded on CD-RWs to be edited without requiring the entire CD to be deleted. This permits individual audio tracks to be added to or deleted from the CD-RW – at up to 24x speed.

### **SafeBurn**

YAMAHA has created a safety standard in the form of SafeBurn technology which represents a triple safety combination ensuring 100% safety and therefore the very best quality of your data when burning CD-R/RWs. SafeBurn comprises:

- **Buffer underrun protection**  
For avoiding spoiled CD blanks when the data flow to the recorder is interrupted. The laser notes the last position imprinted and continues from there as soon as the data supply recommences from the source drive.
- **8 MB buffer**  
Guarantees constant writing at high speed. The advantage of this generous buffer is the fact that the buffer underrun protection included in SafeBurn only acts in emergencies when the internal data flow to the recorder is interrupted.
- **Optimum write speed control**  
This function permits the CRW-F1 series to automatically select the ideal speed for the CD blank inserted in the event of the medium being unsuitable for higher speeds.

### **Service**

The exemplary Yamaha service offers a 48-hour advance exchange, a two-year warranty and a competent, toll-free hotline.

### **Scope of supply**

The scope of supply includes burn software from Ahead: Nero 5.5, NeroMix, InCD 2.0,



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Nero Toolkit, Nero Cover Designer with [DiscT@2](#) function as well as 1 CD-R blank and 1 CD-RW blank, an installation kit, a manual and software instructions.

### ***Yamaha – the leading supplier in the area of CD recording***

In the areas of acoustic and electronic music instruments as well as professional audio systems, Yamaha avails of many years of experience; but Yamaha is also on the ball when it comes to the latest in CD burner technology. As early as 1988, the first CD recording systems were developed and used in professional recording studios. Experience in the production and reproduction of sound and music as well as audio and CD recording from which Yamaha customers benefit!

In-house development and production of key components such as chip sets and laser pick-ups permits YAMAHA to offer CD-R/RW drives of maximum quality and availing of unique functions.

**This Press Release can be used for reprinting.**

**More information available for your readers at [www.yamaha-it.de](http://www.yamaha-it.de)**